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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/790,099	03/02/2004	Yoshitaka Kanzaki	UDK-0017	1168

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EXAMINER

RAABE, CHRISTOPHER M

ART UNIT	PAPER NUMBER
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2879

DATE MAILED: 05/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/790,099

Applicant(s)

KANZAKI, YOSHITAKA

Examiner

Christopher M. Raabe

Art Unit

2879

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

1. Amendment filed February 13, 2006, has been entered and acknowledged by the examiner.
2. Applicant's arguments filed February 13, 2006 have been fully considered but they are not persuasive.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takagaki et al. (USPN 2002/0105272) in view of Ooyama et al. (USPN 6274983).

With regard to claim 1,

Takagaki et al. disclose a short arc type high pressure discharge lamp comprising: a pair of electrodes disposed inside the discharge lamp and facing each other (26 of fig 2), a light emitting portion containing mercury (20A of fig 2, and paragraph 46), and sealing portions that extend to both sides of the light emitting portion, seal part of electrodes respectively, and join the electrodes and metallic foils (20B of fig 2), wherein the metallic foil is an approximately omega shape (30 of fig 12).

Art Unit: 2879

The phrase "formed... by press processing" does not structurally distinguish the claimed invention from the prior art, as is required of apparatus claims (MPEP 2114).

Takagaki et al. do not disclose the amount of mercury.

Ooyama et al. do disclose a lamp with more than 0.15 mg/mm³ mercury contained in a light emitting portion (column 1, lines 10-15) for optimizing light emission.

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the mercury of Ooyama et al. into the lamp of Takagaki et al. in order to improve light-emitting characteristics.

With regard to claim 2,

Takagaki et al. disclose the short arc type high pressure discharge lamp, wherein in a joint portion of at least one of the electrodes and one of the metallic foils, there are at least two welding traces welded from a width direction of the one of metallic foils (figs 12, 13).

With regard to claim 3,

Takagaki et al. disclose a method of welding an electrode and a metallic foil, comprising steps of: preparing a metallic foil having a curved surface portion wherein a cross-sectional view of the metallic foil is an approximately omega shape, placing the electrode in the curved surface, and welding from a width direction of the metallic foil (fig 12).

While Takagaki et al. do not disclose the method of forming the metallic foil, press processing is a well known and widely used method for forming metallic foils, and hence would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate into the method of Takagaki et al.

Art Unit: 2879

With regard to claim 4,

Takagaki et al. disclose a short arc type high pressure discharge lamp having an electrode assembly made by the method according (see rejection of claim 3, and paragraph 2).

5. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Takagaki et al. (as above) in view of Ooyama et al. (as above) and Dixon et al. (USPN 5200669).

With regard to claim 5,

Takagaki et al. disclose a short arc type high pressure discharge lamp comprising: a pair of electrodes disposed inside the discharge lamp and facing each other (26 of fig 2), a light emitting portion containing mercury (20A of fig 2, and paragraph 46), and sealing portions that extend to both sides of the light emitting portion, seal part of electrodes respectively, and join the electrodes and metallic foils (20B of fig 2), wherein the metallic foil is an approximately omega shape (30 of fig 12).

Takagaki et al. do not disclose the amount of mercury, nor the proportion of the volume of the electrode fit in the metallic foil (the examiner is interpreting the volume one of the electrodes to mean that volume which is overlapped by the foil in an axial direction of the electrode).

Ooyama et al. do disclose a lamp with more than 0.15 mg/mm^3 mercury contained in a light emitting portion (column 1, lines 10-15) for optimizing light emission.

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the mercury of Ooyama et al. into the lamp of Takagaki et al. in order to improve light-emitting characteristics.

Art Unit: 2879

Dixon et al. do disclose more than half of volume of one of the electrodes being fit in the metallic foil (column 4, lines 5-15), improving contact between the foil and the electrode.

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the degree to which the foil encloses the electrode of Dixon et al. into the lamp of Takagaki et al. in order to improve the contact between the foil and the electrode.

Response to Arguments

6. The applicant argues that claims 1 and 3 are allowable over prior art as the applied prior art does not disclose forming the metallic foil by press processing. The examiner asserts that while the applied prior art does not teach disclose forming the foil by press processing, claim 1 remains obvious over the prior art, as forming the foil by press processing does not structurally distinguish this apparatus claim from the prior art, and claim 3 remains obvious over the prior art, as the method of forming metallic foils by press processing is well-known and widely used in the art such that it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate into any method utilizing metallic foils.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

Art Unit: 2879


will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher M. Raabe whose telephone number is 571-272-8434. The examiner can normally be reached on m-f 7am-3:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimesh Patel can be reached on 571-272-2457. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CR


ASHOK PATEL
PRIMARY EXAMINER